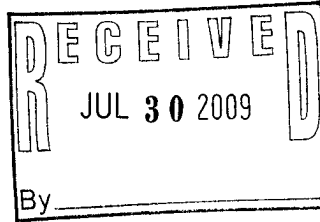




3800 Frederica Street
P.O. Box 20008
Owensboro, KY 42304-0008
270/926-8686

July 27, 2009

Kentucky Division of Water
Surface Water Permits Branch
Permit Support Section
200 Fair Oaks
Frankfort, Kentucky 40601



RE: Texas Gas Transmission, LLC
Midland II Compressor Station
KPDES No. KY0099546
Muhlenberg County, Kentucky

Dear Sir or Madam:

Enclosed is the application for the renewal of the above-referenced permit. Also, enclosed is Check Number 036544 in the amount of \$200.00 in payment of the filing fee.

Please call me at (270) 688-6953 or e-mail me at Doug.Webster@bwpmlp.com if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Doug Webster". The signature is fluid and cursive.

Doug Webster
Senior Environmental Specialist

KPDES FORM 1

AI# 44345

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

This is an application to: (check one)

- ☐ Apply for a new permit.
☒ Apply for reissuance of expiring permit.
☐ Apply for a construction permit.
☐ Modify an existing permit.

Give reason for modification under Item II.A.

A complete application consists of this form and one of the following:

Form A, Form B, Form C, Form F, or Form SC

For additional information contact:

KPDES Branch (502) 564-3410

CK 200-

| | | | |
|---|--|---|---------|
| I. FACILITY LOCATION AND CONTACT INFORMATION | | AGENCY USE | 0099546 |
| A. Name of Business, Municipality, Company, Etc. Requesting Permit Texas Gas Transmission, LLC | | | |
| B. Facility Name and Location | | C. Primary Mailing Address (all facility correspondence will be sent to this address). Include owner's mailing address (if different) in D. | |
| Facility Location Name: Midland II Compressor Station | | Facility Contact Name and Title: Mr. <input checked="" type="checkbox"/> Ms. <input type="checkbox"/> Doug Webster | |
| Facility Location Address (i.e. street, road, etc., not P.O. Box): 6186 Highway 70 | | Mailing Address: 3800 Frederica Street | |
| Facility Location City, State, Zip Code: Bremen, KY 42325 | | Mailing City, State, Zip Code: Owensboro, Kentucky 42301 | |
| D. Owner's name (if not the same as in part A and C): Texas Gas Transmission, LLC | | Facility Contact Telephone Number: 270-688-6953 | |
| Owner's Mailing Address: 3800 Frederica Street Owensboro, KY 42301 | | Owner's Telephone Number (if different): 270-926-8686 | |
| II. FACILITY DESCRIPTION | | | |
| A. Provide a brief description of activities, products, etc: Natural gas compressor station | | | |
| B. Standard Industrial Classification (SIC) Code and Description | | | |
| Principal SIC Code & Description: | | 4922 - Transmission of Natural Gas | |
| Other SIC Codes: | | | |

| | |
|---|--|
| III. FACILITY LOCATION | |
| A. Attach a U.S. Geological Survey 7 1/2 minute quadrangle map for the site. (See instructions) | |
| B. County where facility is located: Muhlenberg | City where facility is located (if applicable): Bremen |
| C. Body of water receiving discharge: Cypress Creek | |
| D. Facility Site Latitude (degrees, minutes, seconds): 37 degrees 18 minutes 20 seconds | Facility Site Longitude (degrees, minutes, seconds): 87 degrees 14 minutes 10 seconds |
| E. Method used to obtain latitude & longitude (see instructions): USGS Topographic Map | |
| F. Facility Dun and Bradstreet Number (DUNS #) (if applicable): 06-168-7421 | |

| | |
|---|---|
| IV. OWNER/OPERATOR INFORMATION | |
| A. Type of Ownership: <input type="checkbox"/> Publicly Owned <input checked="" type="checkbox"/> Privately Owned <input type="checkbox"/> State Owned <input type="checkbox"/> Both Public and Private Owned <input type="checkbox"/> Federally owned | |
| B. Operator Contact Information (See instructions) | |
| Name of Treatment Plant Operator: NA | Telephone Number: NA |
| Operator Mailing Address (Street): NA | |
| Operator Mailing Address (City, State, Zip Code): NA | |
| Is the operator also the owner? Yes <input type="checkbox"/> No <input type="checkbox"/> | Is the operator certified? If yes, list certification class and number below. Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Certification Class: NA | Certification Number: NA |


| | | |
|---|--|--|
| V. EXISTING ENVIRONMENTAL PERMITS | | |
| Current NPDES Number: KY0099546 | Issue Date of Current Permit: February 01, 2005 | Expiration Date of Current Permit: January 31, 2010 |
| Number of Times Permit Reissued: Unknown | Date of Original Permit Issuance: Unknown | Sludge Disposal Permit Number: NA |
| Kentucky DOW Operational Permit #: NA | Kentucky DSMRE Permit Number(s): NA | NA |

Which of the following additional environmental permit/registration categories will also apply to this facility?

| CATEGORY | EXISTING PERMIT WITH NO. | PERMIT NEEDED WITH PLANNED APPLICATION DATE |
|--|--------------------------|---|
| Air Emission Source | G-04-001 Revision 1 | NA |
| Solid or Special Waste | NA | NA |
| Hazardous Waste - Registration or Permit | KYD000822049 | NA |

| |
|--|
| VI. DISCHARGE MONITORING REPORTS (DMRs) |
|--|

KPDES permit holders are required to submit DMRs to the Division of Water on a regular schedule (as defined by the KPDES permit). Information in this section serves to specifically identify the name and telephone number of the DMR official and the DMR mailing address (if different from the primary mailing address in Section I.C).

| | |
|---|--|
| A. DMR Official (i.e., the department, office or individual designated as responsible for submitting DMR forms to the Division of Water): |  Environmental Compliance and Remediation (Doug Webster) |
| DMR Official Telephone Number: | 270-688-6953 |

| | |
|--|-----------------------|
| B. DMR Mailing Address: | |
| <ul style="list-style-type: none"> Address the Division of Water will use to mail DMR forms (if different from mailing address in Section I.C), or Contact address if another individual, company, laboratory, etc. completes DMRs for you; e.g., contract laboratory address. | |
| DMR Mailing Name: | Mr. Doug Webster |
| DMR Mailing Address: | 3800 Frederica Street |
| DMR Mailing City, State, Zip Code: | Owensboro, KY 42301 |


VII. APPLICATION FILING FEE

KPDES regulations require that a permit applicant pay an application filing fee equal to twenty percent of the permit base fee. Please examine the base and filing fees listed below and in the Form 1 instructions and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount (for permit renewals, please include the KPDES permit number on the check to ensure proper crediting). Descriptions of the base fee amounts are given in the "General Instructions."

| | |
|------------------------|----------------------|
| Facility Fee Category: | Filing Fee Enclosed: |
| Non-Process Industry ✓ | \$200 |

VIII. CERTIFICATION

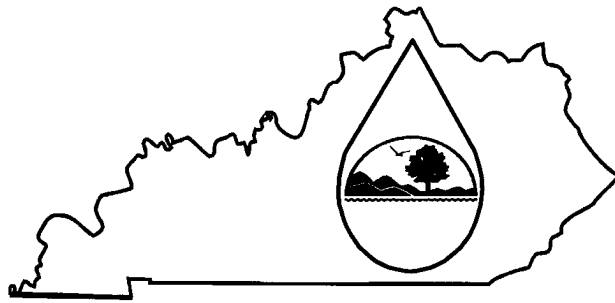
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | |
|--|--|
| NAME AND OFFICIAL TITLE (type or print): | TELEPHONE NUMBER (area code and number): |
| Mr. <input checked="" type="checkbox"/> Ms. <input type="checkbox"/> David Goodwin; VP Compliance and Ops Services | 713-479-8235 |
| SIGNATURE | DATE: |
|  | 7/24/09 |

Return completed application form and attachments to: KPDES Branch, Division of Water, Frankfort Office Park, 14 Reilly Road, Frankfort, KY 40601. Direct questions to: KPDES Branch at (502) 564-3410.

KPDES FORM F

AI #
44345



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, Contact KPDES Branch, (502) 564-3410.

| | | | | | | | | |
|----------------------------|------------|---|---|---|---|---|---|---|
| I. OUTFALL LOCATION | AGENCY USE | 0 | 0 | 9 | 9 | 5 | 4 | 6 |
|----------------------------|------------|---|---|---|---|---|---|---|

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and name the receiving water.

| A. Outfall Number | B. Latitude | | | C. Longitude | | | D. Receiving Water (name) |
|-------------------|-------------|-----|-----|--------------|-----|-----|----------------------------|
| 001 | 37° | 18' | 20" | 87° | 14' | 10" | Tributary to Cypress Creek |
| 002 | 37° | 18' | 20" | 87° | 14' | 10" | Tributary to Cypress Creek |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

II. IMPROVEMENTS

A. Are you now required by any federal, state, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

| 1. Identification of Conditions, Agreements, Etc. | 2. Affected Outfalls | | 3. Brief Description of Project | 4. Final Compliance Date | |
|---|----------------------|---------------------|---------------------------------|--------------------------|----------|
| | No. | Source of Discharge | | a. req. | b. proj. |
| N/A | NA | NA | NA | NA | NA |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

B. You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. SITE DRAINAGE MAP

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.

IV. NARRATIVE DESCRIPTION OF POLLUTANT SOURCES

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

| Outfall Number | Area of Impervious Surface (provide units) | Total Area Drained (provide units) | Outfall Number | Area of Impervious Surface (provide units) | Total Area Drained (provide units) |
|----------------|--|------------------------------------|----------------|--|------------------------------------|
| 001 | 0.25 acres for entire facility | 6.45 acres | NA | NA | NA |
| 002 | | 6.45 acres | | | |
| | | | | | |

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.


See Attachment F-1.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

| Outfall Number | Treatment | List Codes from Table F-1 |
|----------------|--|---------------------------|
| 001 | No treatment via structural or non-structural controls | XX |
| | | |

V. NON-STORM WATER DISCHARGES

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of non-storm water discharges, and that all non-storm water discharges from these outfall(s) are identified in either an accompanying Form C or Form SC application for the outfall.

| Name and Official Title (type or print) | Signature | Date Signed |
|---|---|-------------|
| David Goodwin -VP Compliance & Ops Services |  | 7-24-09 |

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

No testing conducted. Certification based on historical evaluations of the station for KPDES program.

VI. SIGNIFICANT LEAKS OR SPILLS

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

See Attachment F-1.

VII. DISCHARGE INFORMATION

A,B,C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables F-1, F-2, and F-3 are included on separate pages.

E: Potential discharges not covered by analysis - is any toxic pollutant listed in Table F-2, F-3, or F-4, a substance which you currently use or manufacture as an intermediate or final product or by product.

☒ Yes (list all such pollutants below) ☐ No (go to Section IX)

A list of the pollutants includes, but is not limited to, the following: asbestos (transite siding), various metals in paints, molybdates in cooling water additives, various organic fractions in solvents, oil, paint thinners, and paints (examples are toluene, ethylbenzene, methylene chloride, etc.)

VIII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (list all such results below) ☒ No (go to Section IX)

NA

IX. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in item VII performed by a contract laboratory or consulting firm?

☒ Yes (list the name, address and telephone number of, and pollutants analyzed by each such laboratory or firm below; use additional sheets if necessary).

☐ No (go to Section IX)

| A. Name | B. Address | C. Area Code & Phone No. | D. Pollutants Analyzed |
|-----------------------------------|---|--------------------------|--|
| McCoy and McCoy Laboratories, Inc | 821 Industrial Road Madisonville, KY 43431 | (270) 821-7375 | BOD5, COD, Oil and Grease, Nitrate-Nitrite, Total Phosphorus, TSS, TKN |

X. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

NAME & OFFICIAL TITLE (type or print)

AREA CODE AND PHONE NO.

David Goodwin -VP Compliance & Ops Services

(713) 479-8235

SIGNATURE

DATE SIGNED



7/24/09

OUTFALL NO: 001

| Pollutant and CAS Number (if available) | Maximum Values (include units) | | Average Values (include units) | | Number of Storm Events Sampled | Sources of Pollutants |
|---|---|-------------------------|---|-------------------------|--------------------------------|-----------------------|
| | Grab Sample Taken During 1 st 20 Minutes | Flow-weighted Composite | Grab Sample Taken During 1 st 20 Minutes | Flow-weighted Composite | | |
| Oil and Grease | 2.7 mg/L | N/A | 0.5 mg/L | N/A | 25 | N/A |
| Biological Oxygen Demand BOD ₅ | <2.0 mg/L | N/A | N/A | N/A | 1 | N/A |
| Chemical Oxygen Demand (COD) | 42.2 mg/L | N/A | 11.7 mg/L | N/A | 25 | N/A |
| Total Suspended Solids (TSS) | 25.0 mg/L | N/A | 2.9 mg/L | N/A | 25 | N/A |
| Total Kjeldahl Nitrogen | <1.0 mg/L | N/A | N/A | N/A | 1 | N/A |
| Nitrate plus Nitrite Nitrogen | <0.1 mg/L | N/A | N/A | N/A | 1 | N/A |
| Total Phosphorus | 0.01 mg/L | N/A | N/A | N/A | 1 | N/A |
| pH | Minimum 6.1 | Maximum 8.1 | Minimum NA | Maximum NA | 21 | N/A |

[illegible]

Part C - List each pollutant shown in Tables F-2, F-3, and F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow-weighted composite sample.

| 1. Date of Storm Event | 2. Duration of Storm Event (in minutes) | 3. Total rainfall during storm event (in inches) | 4. Number of hours between beginning of storm measured and end of previous measurable rain event | 5. Maximum flow rate during rain event (gal/min or specify units) | 6. Total flow from rain event (gallons or specify units) |
|------------------------------|--|---|---|--|---|
| NA | NA | NA | NA | NA | NA |

7. Provide a description of the method of flow measurement or estimate.

NA

OUTFALL NO: 002

| Pollutant and CAS Number (if available) | Maximum Values (include units) | | Average Values (include units) | | Number of Storm Events Sampled | Sources of Pollutants |
|---|---|-------------------------|---|-------------------------|--------------------------------|-----------------------|
| | Grab Sample Taken During 1 st 20 Minutes | Flow-weighted Composite | Grab Sample Taken During 1 st 20 Minutes | Flow-weighted Composite | | |
| Oil and Grease | 2.3 mg/L | N/A | 0.3 mg/L | N/A | 25 | N/A |
| Biological Oxygen Demand BOD ₅ | <2.0 mg/L | N/A | N/A | N/A | 1 | N/A |
| Chemical Oxygen Demand (COD) | 25.9 mg/L | N/A | 11.2 mg/L | N/A | 25 | N/A |
| Total Suspended Solids (TSS) | 15.0 mg/L | N/A | 2.9 mg/L | N/A | 25 | N/A |
| Total Kjeldahl Nitrogen | <1.0 mg/L | N/A | N/A | N/A | 1 | N/A |
| Nitrate plus Nitrite Nitrogen | <0.1 mg/L | N/A | N/A | N/A | 1 | N/A |
| Total Phosphorus | 0.01 mg/L | N/A | N/A | N/A | 1 | N/A |
| pH | Minimum 6.0 | Maximum 8.8 | Minimum NA | Maximum NA | 22 | N/A |

[illegible]

Part C - List each pollutant shown in Tables F-2, F-3, and F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

[illegible]

Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow-weighted composite sample.

| 1. Date of Storm Event | 2. Duration of Storm Event (in minutes) | 3. Total rainfall during storm event (in inches) | 4. Number of hours between beginning of storm measured and end of previous measurable rain event | 5. Maximum flow rate during rain event (gal/min or specify units) | 6. Total flow from rain event (gallons or specify units) |
|------------------------------|--|---|---|--|---|
| NA | NA | NA | NA | NA | NA |

7. Provide a description of the method of flow measurement or estimate.

NA

Comments

Texas Gas Transmission, LLC

Midland II Compressor Station

KPDES No.: KY0099546

Comment 1: Texas Gas requests that discharges from hydrostatic tests conducted within the station yard be re-permitted in accordance with the terms of existing permit KY0074837.

Comment 2: Confidence 10C is used as a corrosion inhibitor in the boiler water system. The boiler system typically operates as a closed loop. However, either via upsets or periodic draining of the boiler, boiler system water occasionally enters the wastewater collection system. This wastewater will be hauled off for proper treatment and disposal.

Comment 3: Engine cooling systems are typically operated as a closed loop system. Upsets of this system may introduce cooling water into the industrial wastewater collection system. Should this occur, the industrial wastewater will be hauled off for proper treatment and disposal.

Attachment F-1

Texas Gas Transmission, LLC

Midland II Compressor Station

KPDES No.: KY0099546

Section IV. Narrative Description of Pollutant Sources

- B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.**

The Midland II Compressor Station is not currently nor has it in the past three years treated, stored, or disposed of significant materials in a manner to allow exposure to stormwater. The station generates or utilizes and bulk stores various finished product materials for equipment operation in aboveground tanks, including scrubber fluid (natural gas condensate), lube oil, and ethylene glycol. In addition, smaller quantities of lube oils, mineral spirits, paints, pipe coating materials, soaps, and detergents are stored in 1 to 55 gallon containers at various locations on the site for routine station operations. Under normal operating conditions, these materials are securely stored in covered buildings or equipment sheds until use or disposal. Material storage, transfer, and use are currently addressed under the station's SPCC Plan, Groundwater Protection Plan, KPDES-required Best Management Plan (BMP), and RCRA Contingency Plan.

The majority of station natural gas transmission operations are conducted within a fenced area. Pesticides, herbicides, and soil conditioners or fertilizers, if utilized, are applied in accordance with product labels. Offices and other structures may be treated with pesticides on an as-needed basis. Where possible, all herbicides and fertilizers are applied by truck. In areas with limited access, these materials are applied by hand.

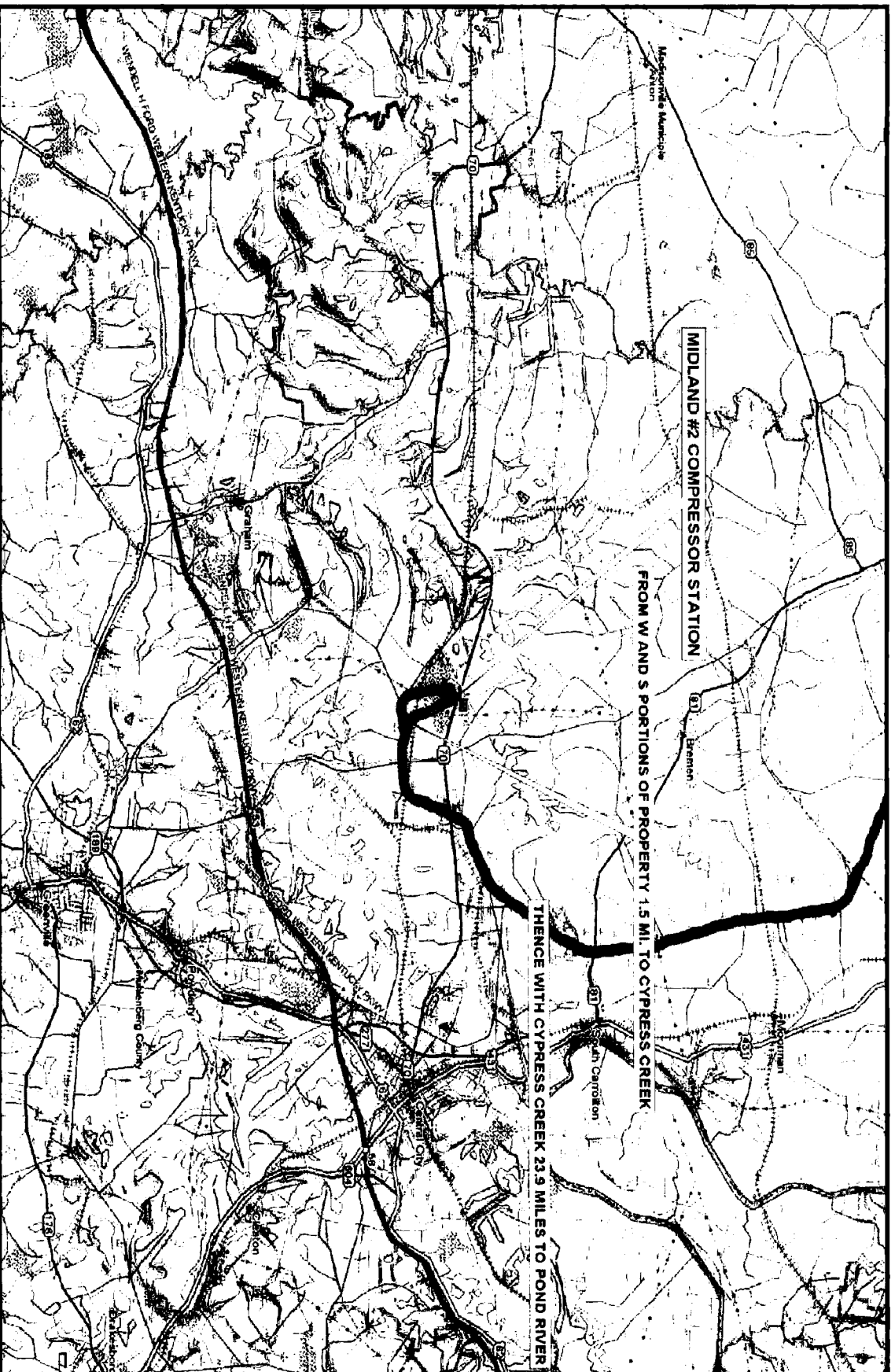
Section VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

There were no significant leaks or spills at the Midland II Compressor Station during the past three years.

SITE LOCATION AND DRAINAGE MAP

Texas Gas Transmission, LLC
Midland II Compressor Station
Permit Number: KY0099546



HWY 70

TO CENTRAL CITY (7.0 MI. ES)



Outfall 001

Outfall 002

C3

C5

C4

C1

C2

SITE MAP
Texas Gas Transmission, LLC
Midland II Compressor Station
Permit No. KY0099546

MIDLAND II COMPRESSOR STATION

NORTH SCALE

REVISION: FEBRUARY 2014

**Site Specific Storage Activities
Texas Gas Transmission, LLC
Midland II Compressor Station
Permit Number: KY0099546**

| Tank No. | Contents | Gallons | Secondary Containment |
|-----------------|-------------------------------|----------------|--------------------------------------|
| 1 | Split Tank Lube Oil/Glycol | 6,405 | Concrete Dike with Concrete Floor |
| 2 | Lube Oil | 6,496 | Concrete Dike with Concrete Floor |
| 3 | Pipeline Condensate | 4,400 | Concrete Dike with Concrete Floor |
| 4 | Used Oil | 1,275 | Concrete Dike with Concrete Floor |
| 5 | Wastewater | 1,275 | Concrete Dike with Concrete Floor |
| 6 | Glycol | 2,712 | Concrete Dike with Concrete Floor |
| 7 | Methanol | 4,456 | Concrete Dike with Concrete Floor |

NOTE: The location of these activities is shown on the “Site Map.”

MATERIAL SAFETY DATA SHEET

Page 1 of 5
Revised 2/02/04
Replaces 8/12/03
Printed 2/03/04

CONFIDENCE 10 C

MSDS ID: 00935

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: CONFIDENCE 10C
Product Descriptor: BOILER TREATMENT
MANUFACTURER: JOHNSON DIVERSEY, INC.
3630 E. KEMPER ROAD
CINCINNATI, OH. 45241

EMERGENCY PHONE NUMBER: (800) 851-7145

II. HAZARDOUS COMPONENTS

| Component Name | CAS Number | % | Exposure Limits | Units |
|----------------------|------------|---------|-----------------|-------|
| DIETHYLAMINO ETHANOL | 100-37-8 | 1 - 5% | TWA 10 (skin) | PPM |
| POTASSIUM HYDROXIDE | 1310-58-3 | 5 - 15% | TWA - C | MG/M3 |
| SODIUM HYDROXIDE | 1310-73-2 | 1 - 5% | TLV-C | MG/M3 |

III. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

CORROSIVE - Contains strong alkali. Causes severe burn to skin and eyes. May be fatal if swallowed. Do not contact eyes, skin or clothing. Wear goggles, face shield, rubber gloves, and protective clothing and boots when handling product. Avoid breathing dust or spray mist. Contain spill or runoff, which may cause environmental damage. Contact with aluminum or soft metals may release flammable hydrogen fumes.

POSSIBLE ROUTES OF ENTRY: All Routes of Entry/Exposure

SIGNS AND SYMPTOMS OF OVEREXPOSURE

ACUTE: **EYES:** Severe burns, tissue damage, or irritation with pain, swelling, blurred or impaired vision, blindness. **SKIN:** Severe burns, tissue destruction, blisters or rash with swelling and pain. **INGESTION:** May be fatal. Severe burns to mouth and throat may result with pain, gastric perforation and difficulty in swallowing or breathing. **INHALATION:** Spray or mists cause burns or severe irritation to nose, throat and respiratory tract with pain, choking, and experience difficulty in breathing.

CHRONIC: Same as acute effects.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Dermatitis, sensitive skin, pulmonary function and asthma.

TARGET ORGAN(S) OF CHEMICAL HAZARD(S): Eyes, skin, respiratory tract, and gastrointestinal tract.

IV. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids apart to completely flush all chemicals from entire eye surface. Get immediate medical attention.

SKIN: Flush thoroughly with plenty of water. Wash with mild soap and water. Remove contaminated clothes and shoes and clean before

MATERIAL SAFETY DATA SHEET

Page 2 of 5
Revised 2/02/04
Replaces 8/12/03
Printed 2/03/04

CONFIDENCE 10 C

MSDS ID: 00935

IV. FIRST AID MEASURES (Cont.)

reuse. Get medical attention for any painful, red or injured skin.

INGESTION: If swallowed, rinse mouth with water. Dilute by drinking several glasses of water. DO NOT induce vomiting. If patient vomits, rerinse mouth. Get immediate medical attention. NOTE: Never give fluids by mouth to an unconscious person.

INHALATION: If inhaled, move to fresh air. If patient is not breathing, give artificial respiration. If breathing is difficult, give oxygen under the direction of trained personnel or a physician. Get immediate medical attention.

V. FIRE FIGHTING MEASURES

FLASH POINT (degrees F): NONE FLAME EXTENSION: N/A
FLAMMABLE LIMITS IN AIR BY VOLUME: LEL: NONE UEL: NONE
UNUSUAL FIRE OR EXPLOSIVE HAZARDS: Toxic fumes or vapor may form during fire.
EXTINGUISHING MEDIA: Water, water spray, CO2, foam or dry powder.
FIRE FIGHTING INSTRUCTIONS: Wear full protective gear and positive pressure breathing apparatus (SCBA) in fire area.
SPECIAL INSTRUCTIONS: Spilled product may cause slippery surface and fall hazard.

VI. ACCIDENTAL RELEASE MEASURES

IF MATERIAL IS RELEASED OR SPILLED:
Confine spilled product to prevent environmental contamination. Keep out of storm sewers or surface waters. Small amount should be swept or mopped up and used for related cleaning tasks where possible. Larger amounts should be absorbed on vermiculite, clay, etc., and disposed in accordance with local, State and Federal regulations.
This product does not contain a reportable quantity (RQ) under CERCLA.

VII. HANDLING AND STORAGE

HANDLING AND STORAGE PRECAUTIONS: Store in a cool, dry area, keep away from acids. Keep container closed when not in use. Wear protective gear when handling or using. Do not pressurize container to empty.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE/FACE PROTECTION: Face shields.
PROTECTIVE GLOVES: Alkali resistant.
RESPIRATORY PROTECTION: Product does not have any established exposure limits. NIOSH/MSHA approved respirator recommended in enclosed or confined spaces where high air concentration or long exposure may occur.
OTHER PROTECTIVE CLOTHING/EQUIPMENT: Wear chemical resistant apron when handling. Eyewash and safety shower in area if contact or splash hazard exists.
ENGINEERING CONTROLS:
VENTILATION: Good general ventilation should be sufficient to control airborne

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VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION (Cont.)

levels.

IX. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Amber liquid, mild amine odor.

BOILING POINT (DEG F): 215

FREEZING POINT: 10 C

SPECIFIC GRAVITY/BULK DENSITY: 1.18

pH: 14.01

pH 1% SOLUTION: 12

VOLATILE BY VOLUME: 81.13

SOLUBILITY IN WATER: Soluble

VAPOR PRESSURE (mmHg): 17.5 at 20 C

VAPOR DENSITY: 17.3

X. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Product stable.

INCOMPATIBILITY WITH OTHER MATERIALS: Acids; Oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: Incomplete combustion forms; oxides of carbon; oxides of sulfur; oxides of nitrogen

HAZARDOUS POLYMERIZATION: None known.

XI. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL TESTING: Toxicological testing has not been performed on the product. Listed below is the available toxicology test data for components of the product.

TOXICITY TEST DATA:

Sodium Hydroxide:

Acute Oral LD50 (rat) 500 mg/kg (RTECS)

Acute Skin LD50 (rabbit) 1350 mg/kg (MSI)

Potassium Hydroxide:

Acute Oral LD50 (rat) - 365 mg/kg (RTECS)

Acute Skin LD50 (rabbit) - 1260 mg/kg (MSI)

Diethylamino ethanol:

Intraperitoneal LD50 (rat) 1220 mg/kg

Dermal LD50 (rabbit) 1260 mg/kg

Dermal LD50 (Guinea pig) 1000 mg/kg

Oral LD50 (rat) 1300 mg/kg

Intraperitoneal LD50 (mouse) 1561 mg/kg

Intramuscular LD50 (mouse) 416 mg/kg

Subcutaneous LD50 (mouse) 308 mg/kg

XII. ECOLOGICAL INFORMATION

Toxicological testing has not been performed on the product. Listed below is the available toxicology test data for components of the product.

ECOTOXICITY TEST DATA:

Potassium Hydroxide:

Acute LC50 (96 hr.) (Pimephles promelas) - 179 mg/l

Acute LC50 (96 hr.) (Daphnia magna) - 60 mg/l

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XII. ECOLOGICAL INFORMATION (Cont.)

Diethylamino Ethanol:

LC50 (96 hr) (Pimephales promelas) 1780 mg/l

ENVIRONMENTAL FATE: No data available.

XIII. DISPOSAL CONSIDERATIONS

RCRA REGULATED: CONCENTRATED PRODUCT WOULD BE CONSIDERED D002 - CORROSIVE,
IF DECLARED HAZARDOUS WASTE.

Spent or excess product is hazardous waste. Do not discharge to sewer or environment. Arrange disposal through a licensed disposal company or treat by special Waste Disposal Sheet. Recycle or dispose of containers by product labeling or governmental regulations.

XIV. TRANSPORT INFORMATION

Please refer to the Bill of Lading/receiving documents for up to date shipping information.

XV. REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA: All ingredients in this product are on TSCA inventory.

HAPS: NONE

VOC CONTENT (EPA Method 24A): % VOC: 2.67 Lb/Gal VOC: 0.215

CERCLA/EPCRA:

Section 313 Toxic Chemicals:

NONE

SARA Section 311/312:

ACUTE: YES CHRONIC: NO FIRE: NO REACTIVITY: NO
SUDDEN RELEASE OF PRESSURE: NO

LISTED CARCINOGEN: NONE

NTP: NO IARC: NO OSHA: NO

HMIS RATINGS: HEALTH: 3 FIRE: 0 REACTIVITY: 0

PERSONAL PROTECTIVE EQUIPMENT: D

NFPA RATING: HEALTH: 3 FIRE: 0 REACTIVITY: 0 SPECIAL ALKALINE

STATE RIGHT-TO-KNOW INFORMATION:

POTASSIUM HYDROXIDE - CAS #1310-58-3

SODIUM HYDROXIDE - CAS #1310-73-2

WATER - CAS #7732-18-5

SODIUM SULFITE - CAS #7757-83-7

DIETHYLAMINO ETHANOL - CAS #100-37-8

CALIFORNIA PROPOSITION 65:

None of the ingredients are on the California proposition 65 list.

XVI. OTHER INFORMATION

Disclaimer: The information contained in this material safety data sheet is based on the knowledge of this specific product and current national legislation. It applies to the product as sold, use dilutions may be less hazardous. It may not be valid for this material if used in combination with any other

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XVI. OTHER INFORMATION (Cont.)

materials or in a process. It is the user's responsibility to evaluate the handling, and use.